Montana Department of ENVIRONMENTAL QUALITY

WATER PROTECTION BUREAU

Agency Use
Permit No.:
Date Rec'd
Amount Rec'd
Check No.
Rec'd By

FORM
NMP

Nutrient Management Plan Associated With Concentrated Animal Feeding Operations (CAFO)

READ THIS BEFORE COMPLETING FORM: Before completing this form (Form NMP), Concentrated Animal Feeding Operation (CAFO) operators need to read the General Permit, particularly Part IV.A. CAFO operators also need to read the "Instructions For Filling Out Form NMP," found at the back of the Form. Form NMP is intended to help CAFO operators develop a site-specific Nutrient Management Plan, in compliance with Part IV.A of the General Permit and all applicable State rules and statutes. Your Nutrient Management Plan must be maintained at the site as required in Part III of the General Permit. Sections B and C on your Form NMP must state the information exactly the same way as it was stated on the most recently submitted version of your Form 2B. Attach additional pages as necessary, indicating the corresponding section number on this NMP form. For additional help in filling out this form please read the attached instructions. The 2008 General Permit, current fee schedule, and related forms are available from the Water Protection Bureau at (406) 444-3080 or http://www.deq.mt.gov/wqinfo/MPDES/CAFO.asp

Section A - NMP Status *(Check one)***:**

☐ New No prior NMP submitted for this site.

☐ Modification Permit Number: MT _ _ _ _ _ _ (Please specify these four numbers)

Section B - Facility or Site Information*:*

Site Name _____

Site Location _____

Nearest City or Town _____ County _____

Section C - Applicant (Owner/Operator) Information:

Owner or Operator Name _____

Mailing Address _____

City, State, and Zip Code _____

Phone Number ( ) _____

Section D - Waste Management

Part I - Nature of Business:

Brief description of the nature of the business: _____

_____

_____

_____

_____

Part II - Statistics and Information:

Table 1 – Livestock Statistics

Animal Type	*# of Days on Site (per year)*	*Annual Manure Production (cubic yds or gal)*
1.		
Method used for estimating annual manure production:		
2.		
Method used for estimating annual manure production:		
3.		
Method used for estimating annual manure production:		
4.		
Method used for estimating annual manure production:		
5.		
Method used for estimating annual manure production:		
6.		
Method used for estimating annual manure production:		
7.		
Method used for estimating annual manure production:		
8.		
Method used for estimating annual manure production:		

Table 2 - Manure Removal from Confinement Area	
Confinement Area (name/type)	***Frequency of Manure Removal (days, months, or years)***
1.	
2.	
3.	
4.	
5.	
6.	
7.	
8.	
9.	

Is this manure temporarily stored in any location? ☐ Yes ☐ No

If so then how and where? _____

_____

_____

_____

_____

Table 3 - Waste Control Structures				
Waste Control Structure (name/type)	*Length (ft)*	*Width (ft)*	*Depth (ft)*	*Volume (cubic ft or gallons)*
1.				
2.				
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				
11.				
12.				

Table 4 – Disposal of Dead Animals	
Method/Practice Description	*Method/Practice Location*
1.	
2.	
3.	

Table 5 – Clean Water Diversion Practices	
Practice Description	*Practice Location*
1.	
2.	
3.	
4.	
5.	
6.	
7.	
8.	

Table 6 – Prohibiting Animals and Wastes from Contact with State Waters	
Method/Practice Description	*Method/Practice Location*
1.	
2.	
3.	
4.	

Table 7 – Chemicals and Contaminants	
Chemical or Contaminant (name)	***Method of Disposal***
1.	
2.	
3.	
4.	
5.	
6.	
7.	

Describe in detail all temporary, permanent and structural Best Management Practices (BMPs) which will be used to control runoff of pollutants from facility's **production area**. Indicate the location of these measures. Include a schedule for implementation of each of these measures. Attached details and specifications may be used to supplement this description. Examples of BMP measures could include but are not limited to: constructing ditches, terraces, and waterways above an open lot to divert clean water run on; installing gutters, downspouts and buried conduits to divert roof drainage; providing more roofed area; decreasing open lot surface area; repairing or adjusting water systems to minimize water wastage; using practical amounts of water for cooling purposes; recycling water if practical and applicable.

Describe in detail all temporary, permanent and structural Best Management Practices (BMPs) which will be used to control runoff of pollutants from facility's **land application area**. Indicate the location of these practices. Include a schedule for implementation of each of these measures. Attached details and specifications may be used to supplement this description. Examples of BMP measures could include but are not limited to: maintaining setbacks from surface waters for manure applications; managing irrigation practices to prevent ponding of wastewater on land application sites; never spray irrigating wastes onto frozen ground; consulting with the Department prior to applying any liquid waste to frozen or snow-covered ground; applying wastes at agronomic rates.

Section E – Land Application

Will manure be land applied to land either owned, rented, or leased by the owner or operator of the facility?

☐ No ☐ Yes If yes, then the information requested in Section E must be provided.

Part I - Photos and/or Maps

Attach an aerial photograph or map of the site where manure is to be applied. (Use multiple photos/maps if necessary to show required details.) The photo(s)/map(s) must be printed on no larger than an 11"x17" piece of paper, and must clearly identify the following items:

- Individual field boundaries for all planned land application areas
- A name, number, letter or other means of identifying each individual land application field
- The location of any down-gradient surface waters
- The location of any down-gradient open tile line intake structures
- The location of any down-gradient sinkholes
- The location of any down-gradient agricultural well heads
- The location of all conduits to surface waters
- The specific manure/waste handling or nutrient management restrictions associated with each land application field.
- The soil type(s) present and their locations within the individual land application field(s)
- The location of buffers and setbacks around state surface waters, well heads, etc.

Part II - Nutrient Management and Waste Utilization via Land Application

The permittee will land apply manure, litter and process wastewater according to the practices set forth in (choose one, and only one):

☐ **Option A (below)** ☐ **Option B (below)**

Option A - Requirements

The Natural Resources Conservation Service (NRCS) has developed standards for nutrient management and waste utilization. The permittee will fill out, maintain, and abide by all items identified in a NRCS generated and approved Comprehensive Nutrient Management Plan (CNMP).

A copy of the CNMP, including all associated maps, tables, references, etc must be provided to the Department on scannable sheets of paper that are no larger than 11"x17", and no smaller than 8.5"x11".

The CNMP is not a replacement for the State's Nutrient Management Plan template (Form NMP). It only functions as an alternative to filling out Option B of Form NMP.

The CNMP must be submitted with Form NMP, and will, with the completed Form NMP, constitute the permittee's site-specific nutrient management plan, and enforceable provisions of the permit upon review and approval of the Department and completion of public comment.

The CNMP is a valid alternative to Option B, provided that the following conditions are met:

- A field-specific assessment of the potential for nitrogen and phosphorus transport from the field to surface waters is conducted and included;
- The form, source, amount, timing, and method of application of nutrients on each field to achieve realistic production goals, while minimizing nitrogen and phosphorus movement to surface waters is addressed;
- Appropriate flexibility for the CAFO to implement multi-year phosphorus application on fields as described in Section 6 of Department Circular DEQ 9 is included;
- Manure is required to be sampled a minimum of once annually for nitrogen and phosphorus content;
- Soil is required to be analyzed a minimum of once every five years for phosphorus content; and,
- The results of the manure and soil sampling analyses are used in determining application rates of manure, litter, and process wastewater.
- No part of the CNMP conflicts with provisions set forth in the CAFO General Permit.

Option B – Requirements

1. Land Application Equipment Calibration

Table 1 - Equipment Calibration	
Equipment Description	***Calibration Procedures***

2. Manure Sampling and Analysis Procedures

A representative manure sample will be analyzed a minimum of once annually for Total Kjeldahl Nitrogen, Nitrate-nitrogen, and Total Phosphorus. Analyses will be conducted by a qualified laboratory, using procedures outlined in the most recent edition of Title 40, Chapter 1, Part 136 of the Code of Federal Regulations. The permittee will confer with the laboratory to ensure that they use these analysis procedures. Analysis results will be reported in lbs/ton or lbs/1,000 gal. Results of these analyses will be used in determining application rates for manure, litter, and process wastewater.

Manure Sample collection will occur according to the following method:

☐ The recommended method(s) found in Section 5 of Department Circular DEQ 9

☐ The method(s) prescribed by the laboratory that will be performing the analysis

☐ Other (describe) _____

_____

_____

_____

3. Soil Sampling and Analysis Procedures

A representative soil sample from the top 6 inch layer of soil in each field will be analyzed for phosphorus content at least once every five years. Analyses will be conducted by a qualified laboratory, using either the Olsen P test or the Bray P1 test. (Note: if the permittee intends to use "*Method A*", below, for determining the appropriate basis for land application of wastes, then the Olsen P test shall be used.) The permittee will confer with the laboratory to ensure that they use the appropriate procedure. Results will be reported in parts per million (ppm) and will be used in determining application rates for manure, litter, and process wastewater.

Soil sample collection will occur according to the following method:

☐ The recommended method(s) found in Section 5 of Department Circular DEQ 9

☐ The method(s) prescribed by the laboratory that will be performing the analysis

☐ Other (describe) _____

_____

_____

4. Land Application Data

Table 2 must be filled out for each field to which manure, litter or process wastewater will or may be applied.

Table 2 - Crops and Manure	
Field Name: _____	
Crop 1	
Irrigated (Y/N)	
Yield Goal (ton/ac or bushel/ac)	
N Content of Harvested Crop (lb/ton or lb/bushel)	
P Content of Harvested Crop (lb/ton or lb/bushel)	
Time of Year When Application will Occur	
Form of manure (liquid/solid)	
Method of Application	
Frequency of Application	
Crop 2	
Irrigated (Y/N)	
Yield Goal (ton/ac or bushel/ac)	
N Content of Harvested Crop (lb/ton or lb/bushel)	
P Content of Harvested Crop (lb/ton or lb/bushel)	
Time of Year When Application will Occur	
Form of manure (liquid/solid)	
Method of Application	
Frequency of Application	
Crop 3	
Irrigated (Y/N)	
Yield Goal (ton/ac or bushel/ac)	
N Content of Harvested Crop (lb/ton or lb/bushel)	
P Content of Harvested Crop (lb/ton or lb/bushel)	
Time of Year When Application will Occur	
Form of manure (liquid/solid)	
Method of Application	
Frequency of Application	

5. The permittee shall assess the risk of phosphorus contamination of state waters. An assessment shall be conducted for each field, under the control of the operator, to which manure, litter or process wastewater will or may be applied. If a new field is added in the future, then a new assessment must be filled out for that field (this will require a permit modification). The permittee has the option of using either Method A or Method B

(below) to complete the assessment. Copies of all tables and calculations used to complete the assessments, as well as the results of the assessments, shall be submitted to the Department and copies shall be maintained on-site at the facility and available for Departmental review. The results of the assessments shall be used to determine the appropriate basis for land application of wastes from the facility.

Method A – Representative Soil Sample

a) Obtain a representative soil sample from the field.
b) Have the sample analyzed for Phosphorus by a qualified lab. The "Olsen P test" must be used for the analysis, and the result must be reported in parts per million (ppm).
c) Using the results of the Olsen P test, determine the application basis according to Table 3 below

Table 3 – Soil Test

Olsen P Soil Test Result (ppm)	*Application Basis*
<25.0	Nitrogen Needed
25.1 - 100.0	Phosphorus Needed
100.0 - 150.0	Phosphorus Needed to Crop Removal Rate
>150.0	No Application

Method B – Phosphorus Index

a) Complete a Phosphorus Index according to tables 4, 5, and 6 for each crop grown on each field. For information on filling out specific sections of Table 4, please refer to Attachment 2 of Department Circular DEQ 9.

Table 4 - Phosphorus Index

Site Category Factor	*None (0)*	*Low (1)*	*Medium (2)*	*High (4)*	*Very High (8)*	*Risk Value (0, 1, 2 ,4, 8)*	*Weight Factor*	*Weighted Risk*
Soil Erosion	N/A	<5 tons/ac/yr	5-10 ton/ac/yr	10-15 tons/ac/yr	>15 tons/ac/yr		X 1.5	
Furrow Irrigation Erosion	N/A	Tailwater recovery, QS>6 very erodible soils, or QS>10 other soils	QS>10 for erosion resistant soils	QS>10 for erodible soils	QA>6 for very erodible soils		X 1.5	
Sprinkler Irrigation Erosion	All sites 0-3% slope, all sandy sites, or site evaluation indicates little or no runoff, large spray on silts 3-8%	Medium spray on silty soils 3-15% slopes, large spray on silty soils 8-15% slope, low spray on silt soils 3-8%, large spray on clay soil 3-15% slope	Medium spray on clay soils 3-8% slopes, large spray on clay soils >15% slope, medium spray on silt soil >15% slope	Medium spray on clay soils >8% slope, low spray on clay soil 3-8% slope, low spray on silty soils >15% slopes	Low spray on clay soils >8% slopes		X 0.5	
Runoff Class	Negligible	Very Low or Low	Medium	High	Very High		X 0.5	
Bray P1 Soil Test P	--------	<30 ppm	30-60 ppm	60-120 ppm	>120 ppm		X 1.0	

Olson Soil Test P	--------	<20 ppm	20-40 ppm	40-80 ppm	>80 ppm		X 1.0	
Commercial P Fertilizer Application Method	None Applied	Placed with planter or injected deeper than 2 inches	Incorporated <3 months prior to planting or surface applied during the growing season	Incorporated >3 months before crop or surface applied <3 months before crop emerges	Surface applied >3 months before crop emerges		X 1.0	
Commercial P Fertilizer Application Rate	None Applied	<30 lbs/ac P2O5	31-90 lbs/ac P2O5	91-150 lbs/ac P2O5	>150 lbs/ac P2O5		X 1.0	
Organic P Source Application Method	None Applied	Injected deeper than 2 inches	Incorporated <3 months prior to planting or surface applied during growing season.	Incorporated >3 months before crop or surface applied <3 months before crop.	Surface applied to pasture or >3 months before crop emerges.		X 1.0	
Organic P Application Rate	None Applied	<30 lbs/ac P2O5	31-90 lbs/ac P2O5	91-150 lbs/ac P2O5	>150 lbs/ac P2O5		X 1.0	
Distance to Concentrated Surface Water Flow	>1,000 feet	200-1,000 feet, or functioning grass waterways in concentrated surface water	100-200 feet	<100 feet	0 feet or applications are directly into concentrated surface water flow areas.		X 1.0	
						Site/Field Total Phosphorus Index Value		

b) Using the calculated Total Phosphorus Index Value, assign the overall site/field vulnerability to phosphorus loss according to Table 5 below.

Table 5 – Total Phosphorus

Total Phosphorus Index Value	***Site Vulnerability to Phosphorus Loss***
<11	Low
11-21	Medium
22-43	High
>43	Very High

c) Using the calculated Site Vulnerability to Phosphorus Loss, determine the appropriate application basis according to Table 6 below.

Table 6 – Site Vulnerability to Phosphorus Loss

Site Vulnerability to Phosphorus Loss	*Application Basis*
Low	Nitrogen Needs
Medium	Nitrogen Needs
High	Phosphorus Need Up to Crop Removal
Very High	Phosphorus Crop Removal or No Application

d) The permittee will complete Table 7, below, for each crop grown on each field to which manure or process waste water is or may be applied. A copy of each Table 7 will be maintained on site, and a copy will be submitted to the Department.

Table 7 – Nutrient Budget Worksheet

Nutrient Budget		*Nitrogen-based Application*	*Phosphorus-based Applcication*
	Crop Nutrient Needs, lbs/acre (from MSU EB161, January 2003) included in Department Circular DEQ 9		
(-)	Credits from previous legume crops, lbs/acre (from Table 8, below)		
(-)	Residuals from past manure production, lbs/acre (lbs/acre applied in previous year(s) x fractions listed in Table 9, below)		
(-)	Nutrients supplied by commercial fertilizer and Biosolids, lbs/acre		
(-)	Nutrients supplied in irrigation water, lbs/acre		
	= Additional Nutrients Needed, lbs/acre		
	Total Nitrogen and Phosphorus in manure, lbs/ton or lbs/1,000 gal (from manure test)		
(+)	Nutrient Avalability factor (for Nitrogen based application see Table 10, below; for Phosphorus based application use 1.0)		
	= Available Nutrients in Manure, lbs/ton or lbs/1,000 gal		
	Additional Nutrients needed, lbs/acre (calculated above)		
(/)	Available Nutrients in Manure, lbs/ton or lbs/1,000 gal (calculated above)		
	= Manure Application Rate, tons/acre or 1,000 gal/acre		

Table 8 – Legume Credits	
Legume	***N Fixation (lbs/ac)****
Alfalfa (after harvest)	40-80
Alfalfa (green manure)	80-90
Spring Pea	40-90
Winter Pea	70-100
Lentil	30-100
Chickpea	30-90
Fababean	50-125
Lupin	50-55
Hairy Vetch	90-100
Sweetclover (annual)	15-20
Sweetclover (biennial)	80-150
Red Clover	50-125
Black Medic	12-25
*Large CAFOs must use the maximum N fixation in lbs/ac unless appropriate justification is given showing lower N fixation is appropriate. Medium and Small CAFOs must use an N fixation in lbs/ac that is within the range specified above. Source: NRCS Specification MT590, July 2002	

Table 9 – Nitrogen Mineralization Rates		
Type of Waste	***1st Year After Application Fraction Available N****	***2nd Year After Application Fraction Available***
Fresh poultry manure	0.90	0.02
Fresh swine manure	0.75	0.04
Fresh cattle manure	0.70	0.04
Fresh sheep and horse manure	0.60	0.06
Liquid manure, covered tank	0.65	0.05
Liquid manure, storage pond	0.65	0.05
Solid manure, stack	0.60	0.06
Solid manure, open pit	0.55	0.05
Manure pack, roofed	0.50	0.05
Manure pack, open feedlot	0.45	0.05
Storage pond effluent	0.40	0.06
Oxidation ditch effluent	0.40	0.06
Aerobic lagoon effluent	0.40	0.06
Anaerobic lagoon effluent	0.30	0.06
* If irrigated, reduce 1st year mineralization by 0.05 Source: NRCS Specification MT633, August 2001		

Table 10 –Nitrogen Availability and Loss as Affected by Method of Application	
Application Method	***Nitrogen Availability and Loss as Affected by Method of Application***
Injection (sweep)	0.90
Injection (knife)	0.95
Broadcast (incorporated within 12 hours)	0.7
Broadcast (incorporated after 12 hours, but before 4 days)	0.6
Broadcast (incorporated after 4 days)	0.5
Sprinkling	0.75
Source: NRCS Specification MT633, August 2001	

Section F - CERTIFICATION

Permittee Information:
This Form NMP must be completed, signed, and certified as follows:

- For a corporation, by a principal officer of at least the level of vice president;
- For a partnership or sole proprietorship, by a general partner or the proprietor, respectively; or
- For a municipality, state, federal, or other public facility, by either a principal executive officer or ranking elected official.

All Permittees Must Complete the Following Certification:

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information; including the possibility of fine and imprisonment for knowing violations. [75-5-633, MCA]

A. Name (Type or Print)	
B. Title (Type or Print)	**C. Phone No.**
D. Signature	**E. Date Signed**

Return the Form NMP, Nutrient Management Plan Associated With Concentrated Animal Feeding Operations (CAFO) to:

Department of Environmental Quality
Water Protection Bureau
PO Box 200901
Helena, MT 59620-0901
(406) 444-3080

INSTRUCTIONS FOR

Form NMP - Nutrient Management Plan Associated With Concentrated Animal Feeding Operations

You may need the following items in order to complete this form: A copy of your most recently submitted Form 2B; a copy of Department Circular DEQ 9, "Montana Technical Standards for Concentrated Animal Feeding Operations;" a copy of soil and manure sample analyses; and a calculator.

Please type or print legibly; forms that are not legible or are not complete will be returned.

SPECIFIC ITEM INSTRUCTIONS

Section A – NMP Status:
Check the box that applies and provide the requested information. If Form NMP has not been previously submitted for this site, check the first box (New). If you submitted a Form NMP and the Department returned it to you as deficient or incomplete, check the second box (Resubmitted); if you were notified by the Department that the permit coverage expired and you are now submitting an updated Form NMP, check the third box (Renewal); if there is a change in the facility or site information (Section H), check the last box (Modification). If a Form NMP has been submitted and returned as incomplete, then the permit number appears in the upper right hand corner of the form. If the site is covered under the *General Permit for Concentrated Animal Feeding Operations*, the number is given on the Authorization letter sent to you by the Department. The permit number must be included on any correspondence with the Department regarding this site.

Section B – Facility or Site Information:
The information must be stated exactly the same way as it was stated on the most recently submitted version of your Form 2B.

Section C – Applicant (Owner/Operator) Information:
The information must be stated exactly the same way as it was stated on the most recently submitted version of your Form 2B.

Section D – Waste Management:
Part I – Nature of Business: Provide a brief description of the nature of the business conducted at your facility.

Part II – Statistics and Information: In Table 1, identify each type of animal confined at your facility for some period of time in a given year. The definition of "type" could include animals of a given species, animals of a given weight class (e.g. piglets, sows), or animals housed for a specific purpose (e.g. dry cows, milking cows).

"Number of days on site per year" means the number of days at least one animal of a given type is held in confinement during any 12-month period.

"Annual manure production" means the volume of manure (from a given animal type) that is stored, land applied, or transferred to other persons during any given 12-month period. When describing the method used to calculate annual manure production, include all formulas, factors, references to tables, and other resources used to calculate manure production. Be sure to account for soiled bedding materials and manure-contaminated runoff water, also considered manure under state regulations.

In Table 2, list each confinement area at your facility. For example, pens, freestall barns, hog barns, poultry barns, yard back, calving pens, etc.

"Temporary manure storage areas" may include, but are not limited to, structures such as underground tanks and underfloor pits.

In Table 3, list *all* waste control structures. These may include, but are not limited to, manure lagoons, manure ponds, evaporation ponds, wastewater retention ponds, contaminated runoff retention ponds, settling basins, underground storage tanks, underfloor pits, manure solids stacking pads, composting facilities, and dry-stack facilities. Berms, dikes, concrete curbs, ditches, and waste transfer pipelines are also waste control structures and must be listed, though some of the requested measurements may not apply (e.g. "volume" usually does not apply to a waste transfer pipeline).

In Table 4, please be as specific as possible with the information that you provide. For example, if dead animals are disposed of by burial, the method/practice description should include the fact that they are buried, how quickly after death they are hauled to the burial site, and how quickly they are covered with soil. The method/practice location information should be detailed enough that an inspector could find the site without the need for additional guidance. It may not simply reference a map.

In Table 5, the practice description does not need to be any more detailed than "berm," "ditch," "grassy swale," etc. The practice location may not simply reference a map.

In Table 6, the practice description does not need to be any more detailed than "fence," "wall," etc. The practice location may not simply reference a map.

In Table 7, list all major chemicals or other contaminants handled on site as part of your CAFO operation. These would include, but are not be limited to, pesticides, herbicides, animal dips, disinfectants, etc. Specify the method of disposal for each chemical/contaminant.

When describing the Best Management Practices (BMPs) used to control runoff of pollutants from the production area, it is not necessary to include BMPs that you already mentioned in Tables 2 through 7. Please note that "production area" means that part of a CAFO that includes the animal confinement area, the manure storage area, the raw materials storage area, and the waste containment areas. The "animal confinement area" includes but is not limited to open lots, housed lots, feedlots, confinement houses, stall barns, free stall barns, milkrooms, milking centers, cowyards, barnyards, medication pens, walkers, animal walkways, and stables. The "manure storage area" includes but is not limited to lagoons, runoff ponds, storage sheds, stockpiles, under house or pit storages, liquid impoundments, static piles, and composting piles. The "raw materials storage area" includes but is not limited to feed silos, silage bunkers, and bedding materials. The "waste containment area" includes but is not limited to settling basins, and areas within berms and diversions which separate uncontaminated storm water. Also included in the definition of production area is any egg washing or egg processing facility, and any area used in the storage, handling, treatment, or disposal of mortalities.

If you transfer all of the wastes your CAFO produces, and do not land apply any of it to ground under your operational control, then you will not have any land application area BMPs to describe.

Section E – Land Application:

If all of the manure produced at your facility will be transferred to other persons for use in areas beyond your operational control, then you do not need to provide the information requested in Parts I and II of Section F of this form.

Part I – Photos and/or Maps:
Manure/waste handling and nutrient management restrictions that must be on the photo/map include buffers and setbacks around state surface waters, well heads, etc.

Part II – Nutrient Management and Waste Utilization via Land Application:
The purpose for having two options is to allow you to make use of the valuable technical assistance provided by the USDA's Natural Resources Conservation Service (NRCS), if you should so desire.

Option B – Requirements: Land application equipment calibration is essential to ensuring that nutrients are being applied at agronomic rates. Section 5 of Department Circular DEQ 9 contains sample instructions on how to calibrate some types of land application equipment. The instructions in Section 5 of Department Circular DEQ 9 are purely recommendations, other methods may work just as well. When sending manure or soil samples to a laboratory for analysis, it is your responsibility to make sure that the lab uses the correct sampling procedures. You should never just "assume" that they will. It is also your responsibility to make sure that the results of the analysis are reported using the appropriate units of measurement. Before you take any samples, talk to the lab that you intend to use. Ask them if they have specific instructions on how to obtain and submit samples. If they do, then you must follow their instructions in order to help ensure that the analysis results you get are as accurate as possible.

You will most likely need to make and fill out multiple photocopies of "Table 2 – Crops and Manure" For information on how to fill out specific sections of Table 4 – Phosphorus Index, please refer to Attachment 2 of Department Circular DEQ 9.

"Table 7 – Nutrient Budget Worksheet" must be filled out for each crop grown on each field to which manure or process wastewater will or may be applied, regardless of whether Method A has been used or Method B has been used. When filling out Table 7, be sure and refer to nitrogen in terms of pounds of elemental nitrogen. Phosphorus should be referred to in pounds of P_2O_5.

Section F – Certification:
If Form NMP is filled out by one person and signed by another, the person signing the document should read it thoroughly, checking for mistakes. Misspellings, omissions, and other errors tend to get perpetuated in the permitting process, leading to frustration and confusion on the part of the permittee and the Department. Also, the person signing Form NMP may be held accountable for any failures in following the plan. Always retain a copy of each of the documents that you send to the Department.

If you have any questions concerning how to fill out this form, or other forms related to the Montana Pollutant Discharge Elimination System (MPDES) discharge permitting program, please contact the Department's Water Protection Bureau at:

Phone: (406) 444-3080
Fax: (406) 444-1374
1520 East Sixth Avenue
P.O. Box 200901
Helena, MT 59620-0901